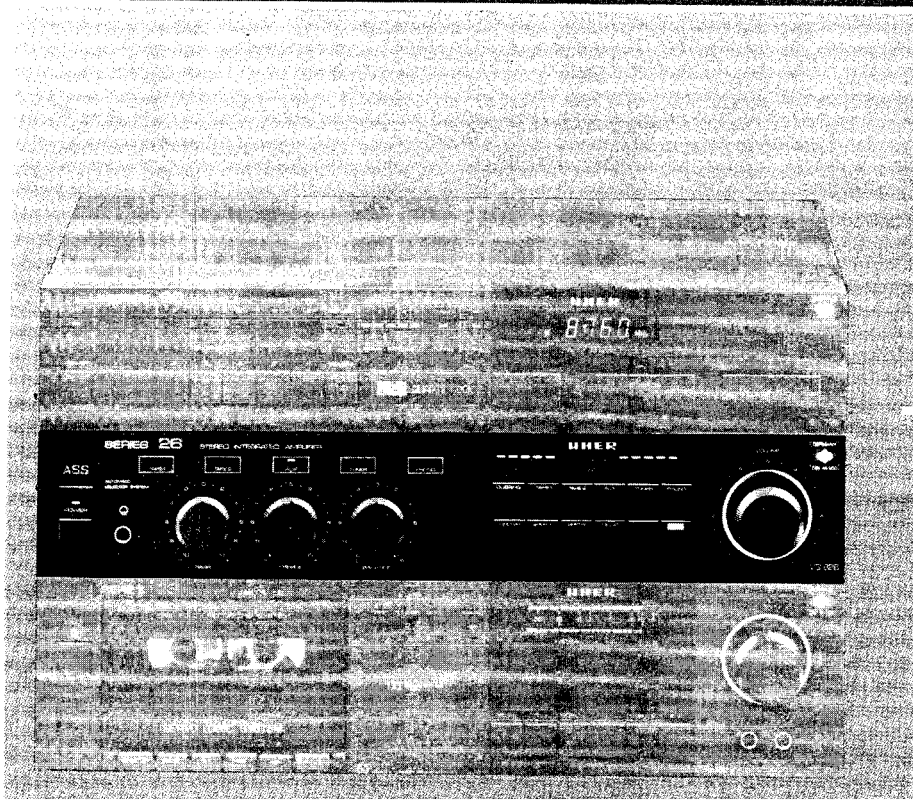
UHER AMPLIFIER



VG826

STEREO INTEGRATED AMPLIFIER

SERVICE MANUAL

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SPECIFICATIONS

AUDIO SECTION

Sensitivity
- Input: 100Hz
- Phono(MM)(at Rec out) 2.5mV/50kΩ/100pF
- Aux 150mV/50kΩ/82pF
- Tape monitor 150mV/50kΩ/82pF

Sensitivity channel difference . . . ±2dB

Headphone output
- Input: 1000Hz
- Phono 2.5mV Aux 150mV 500mV/8Ω
- Output: At speaker output 32W

Rec. output
- Input: 1000Hz
- Phono 2.5mV Aux 150mV 150mV/100kΩ
- (At speaker output with Volume: 3.2W)

IM Distortion factor
- Input: Aux 70Hz: 7000Hz/4:1
- Output: 26W (40.7Vp-p) 0.08%

Output power
- Sinus power (1kHz)
- at 8Ω 1%THD 38W
- at 4Ω 1%THD 44W
- Music power
- at 8Ω 10%THD 81W
- at 4Ω 10%THD 132W
- F.T.C. power (20-20000Hz)
- at 8Ω 0.08%THD 32W

Frequency response
- Input: Aux. Tape monitor
- Output: 1000Hz 32W –6dB from Volume max. ±3dB . . . . . 10 – 35,000Hz

Phono mag equalizer response
- Input: Phono
- Output: RIAA ± 1.0dB . . . . . 30 – 20,000Hz

Tone control action
- Input: Aux
- Output: 1000Hz 0.775V
- Boost: 100/10000Hz . . . . . +8.5dB
- Cut: 100/10000Hz . . . . . -8.5dB

Loudness control action
- Input: Aux 150mV (1kHz)
- Output: –30dB Att. from Volume max. (Loudness switch: on)
- 100Hz . . . . . +6dB
- 10000Hz . . . . . +8dB

Maximum input signal
- Input: 1000Hz
- Output: 3.2W (with Volume)
- Phono 130mV
- Aux 4.0V
- Tape monitor 4.0V

High filter action
- Input: Aux 150mV
- Output: 32W –6dB from Volume max. (Hi-filter switch: on) . . . . –3dB

Signal to noise ratio (IHF-A Network)
- Phono Input: 5mV
  - Output: Rec out 80dB
- Aux: Input short 92dB
- Tape monitor: Input short 92dB

Residual noise 0.5mV

Damping factor
- Input: Aux 1000Hz
- Output: 3.2W . . . . . 50 –

Volume control tracking error . . . 4dB
- Input: Aux
- Output: 3W at Volume max. –40dB

Crosstalk
- Output: 3.2W (with Volume)
- Aux: Input 150mV
  - 1000Hz 65dB
  - 20kHz 33dB
- Phono Input/2.5mV
  - 1000Hz 55dB

Output level difference 3dB
- Input: 1000Hz
- Aux: 150mV
- Phono: 2.5mV
- Output: 10'clock position of volume control

GENERAL

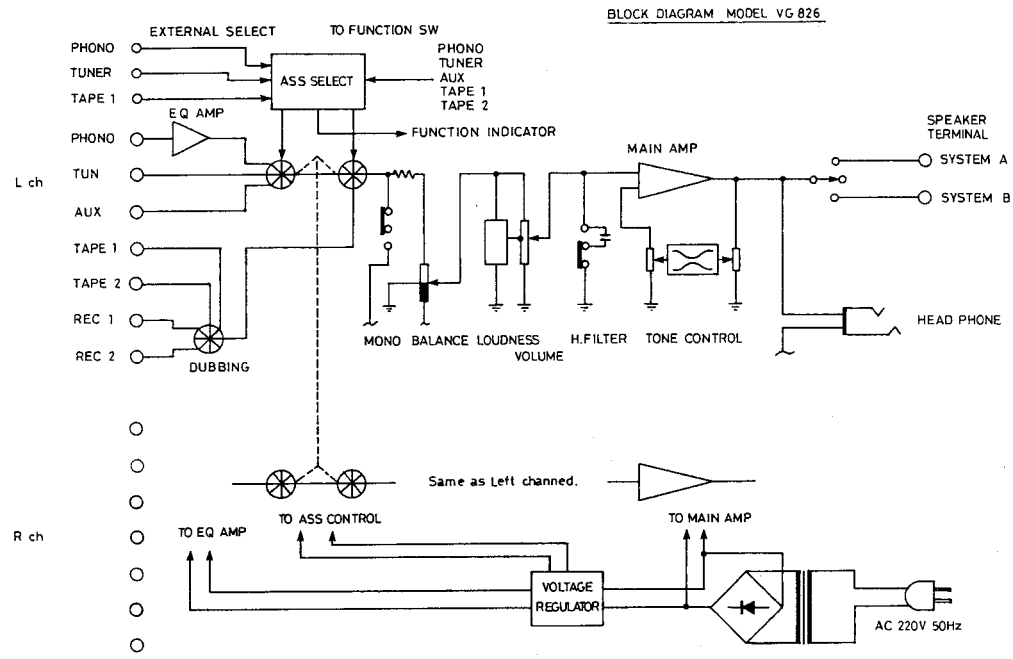
Maximum power consumption . 250W

AC power supply . . . . . 220V 50 Hz

Weight and Dimensions (Approx.)
- Net weight 4.2kg
- Gross weight 5.2kg
- Dimension (W/H/D) 422/77/238mm

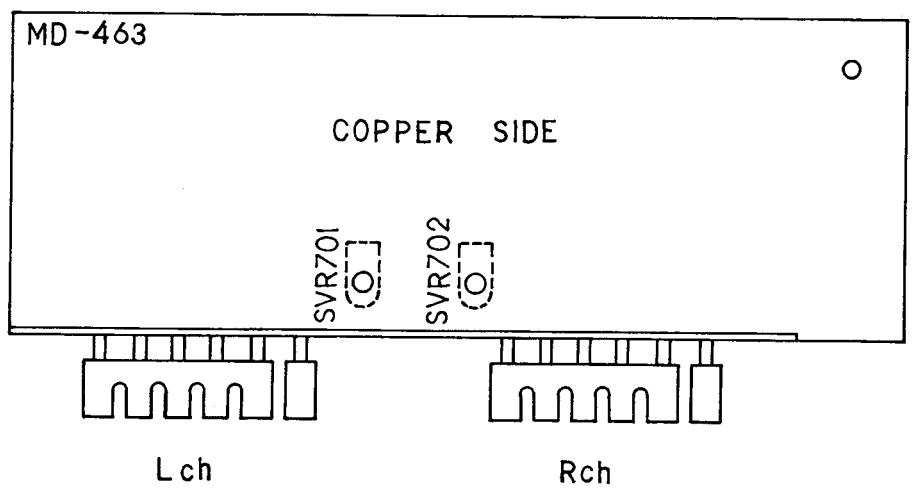
Specifications and design are subject to change without notice.

BLOCK DIAGRAM



METER ADJUST

Step	Input		Output indicator	Adjustor	Adjust for	Note
	Connection	Setting	Connection			
			SIGNAL LEVEL			
1	AUX	1 kHz	VTVM and 4Ω Dummy S.P. OUT	Input level	7 W	
2	SAME AS STEP (1)		SIGNAL METER	SVR701 SVR702	5th segments just light up	



DISASSEMBLY

1. CABINET COVER REMOVAL

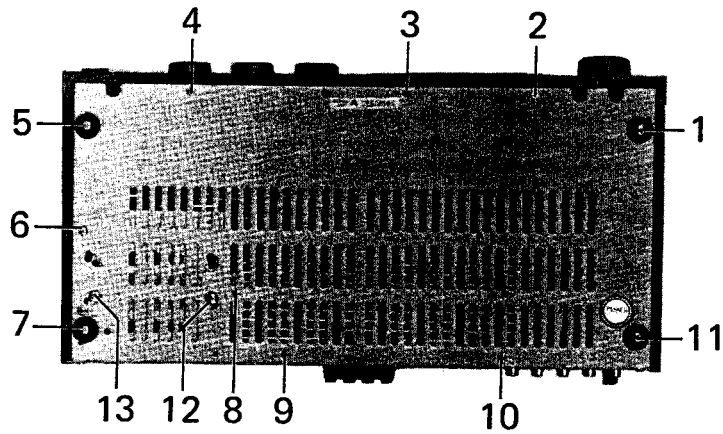
a. Remove four screws from both sides of the cabinet cover.
b. Remove a screw from the rear of the cabinet cover.
c. Lift the cabinet cover away from the unit.

2. BOTTOM PLATE REMOVEL

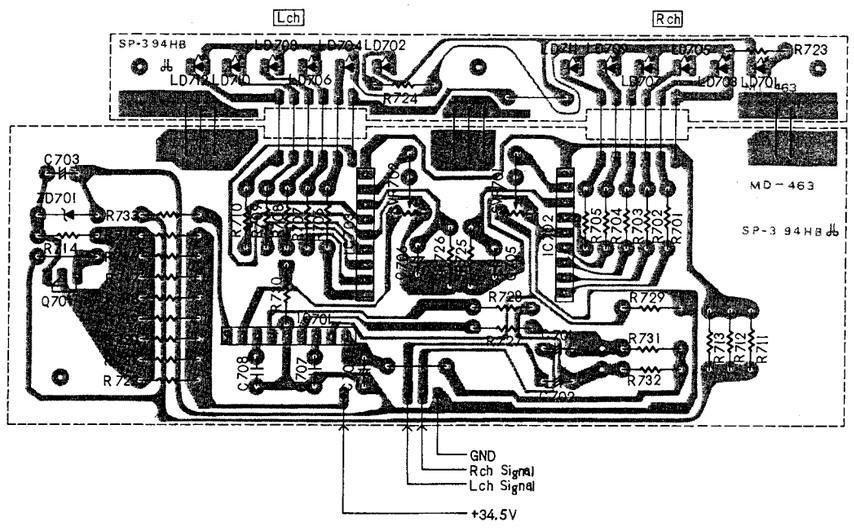
a. Remove 11 screws (#1~#11) from the bottom plate.

3. POWER TRANSFORMER REMOVEL

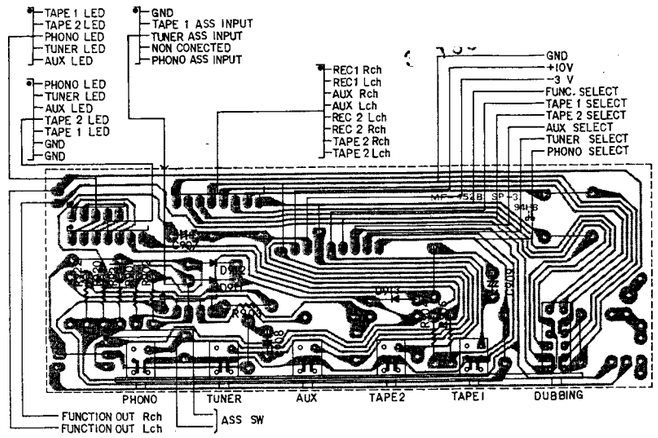
a. De-solder all the leads of power transformer from the PCBs.
b. Remove 2 screws (#12 & #13).
c. Lift the power transformer.



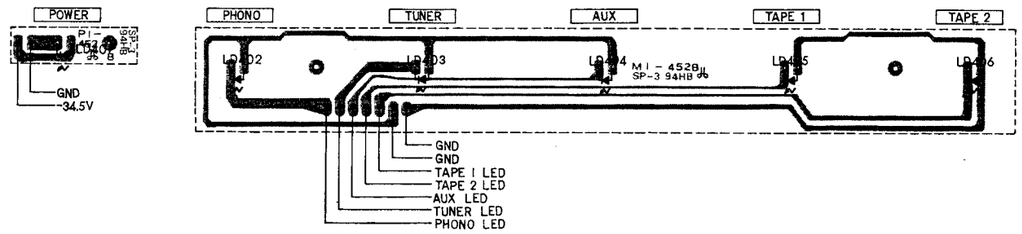
METER DRIVER P.C. BOARD



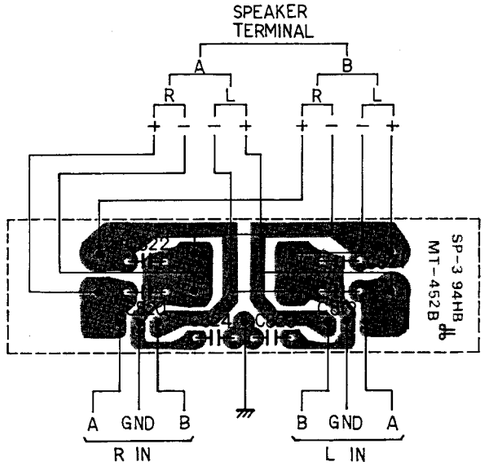
FUNCTION SELECT P.C. BOARD



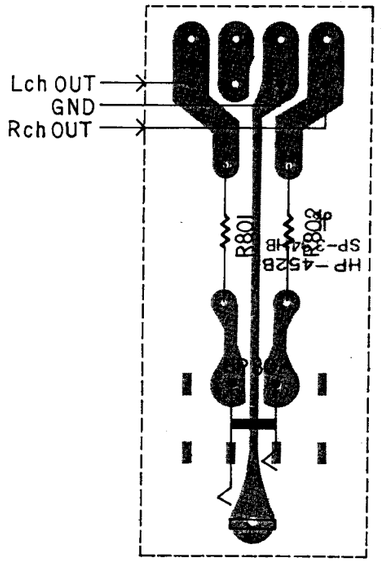
FUNC. POWER IND. P.C. BOARD



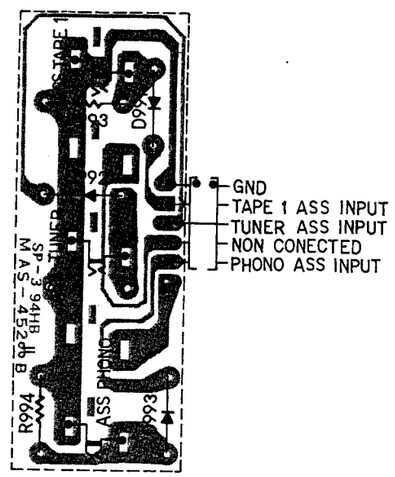
S.P. TERMINAL P.C. BOARD



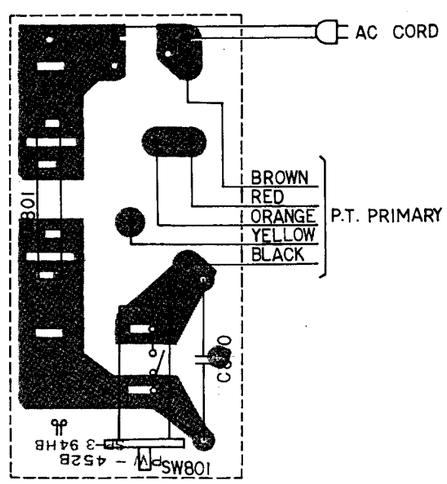
H.P. P.C. BOARD



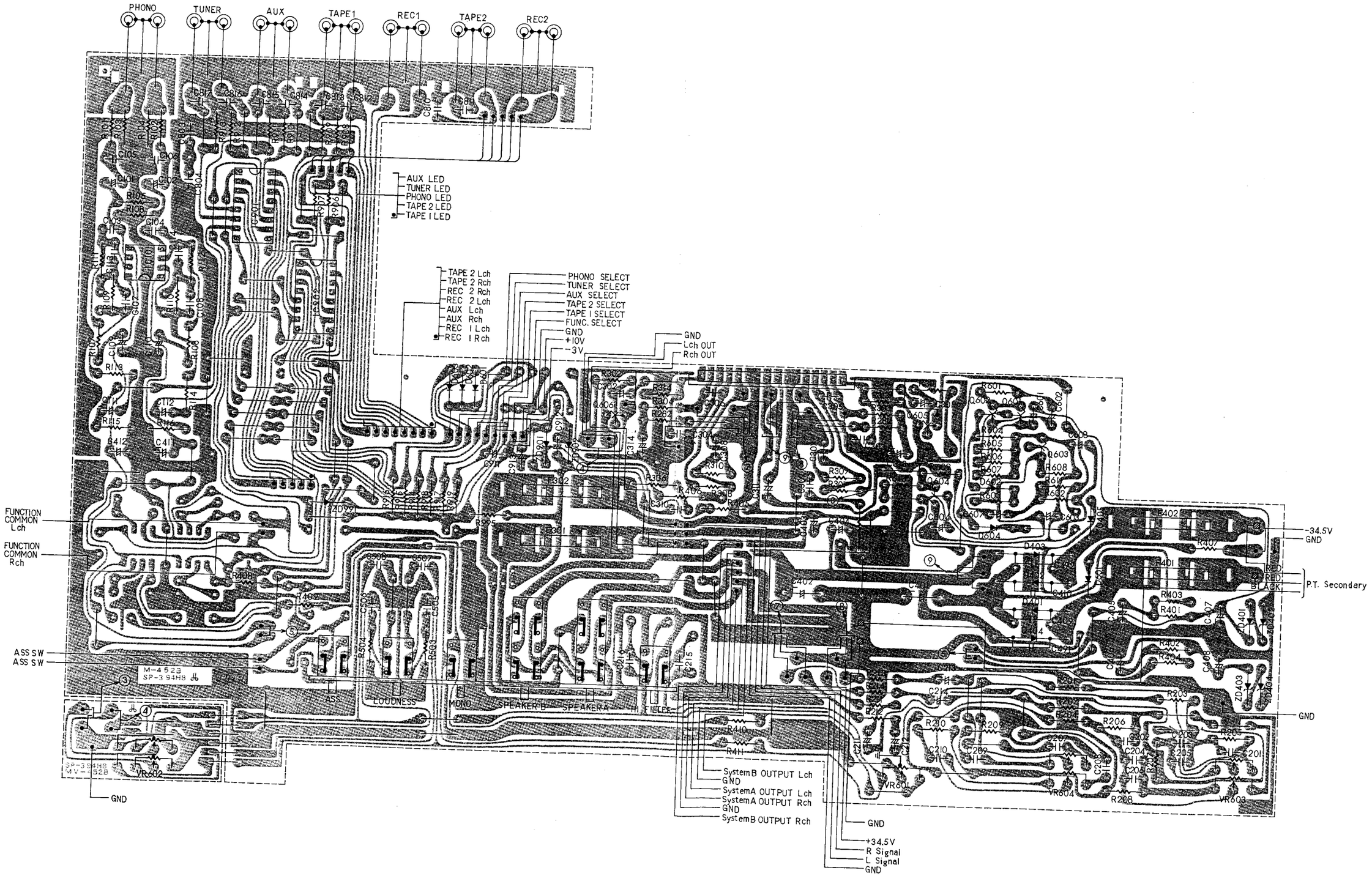
A.S.S.JACKS P.C. BOARD



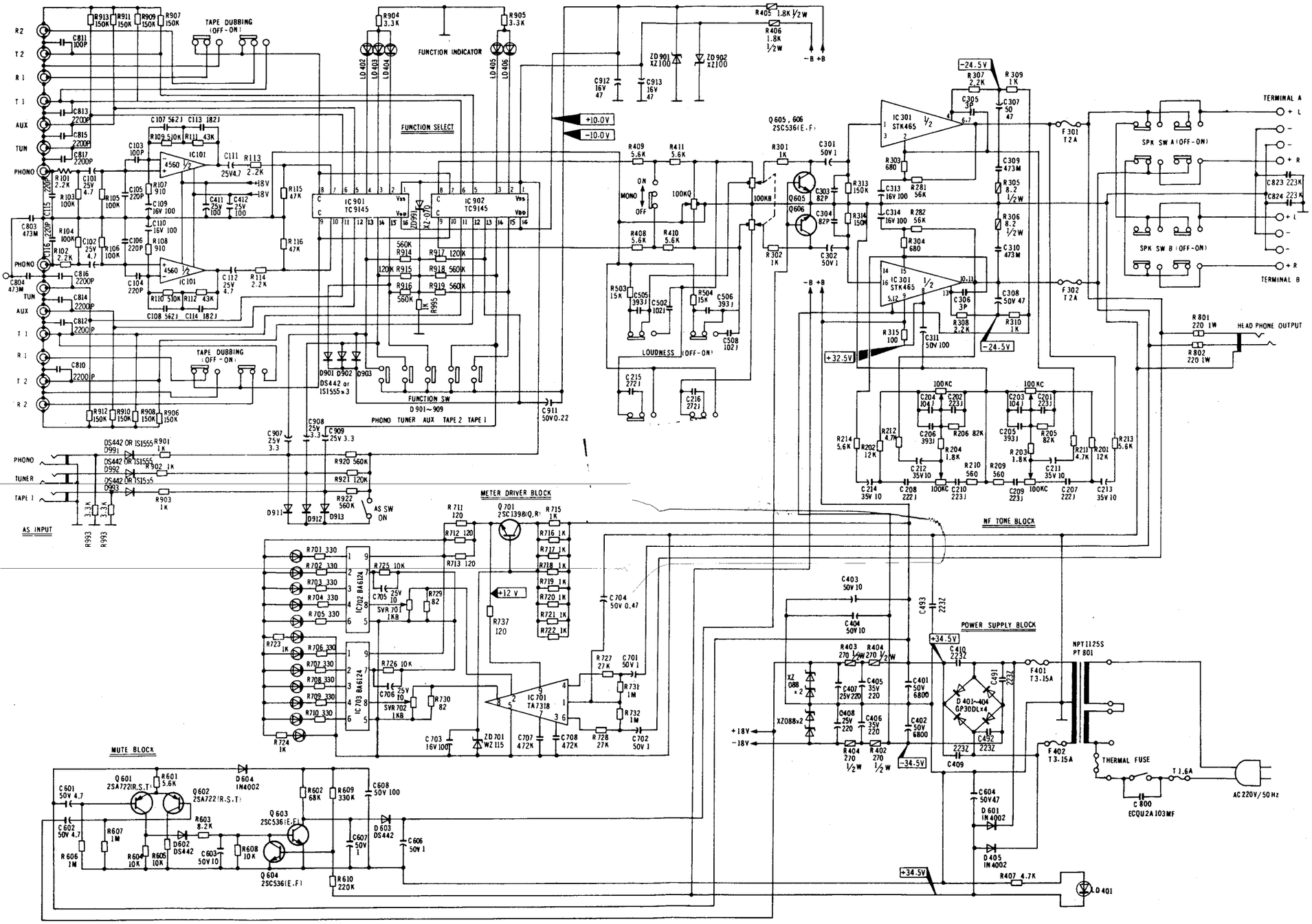
POWER SW. P.C. BOARD



MAIN P.C. BOARD



CIRCUIT DIAGRAM



PARTS LIST

Part No.	Description	Symbol No.	Q'ty
2SA722-R, S, T	Transistor	Q601, 602	2
2SC1398-Q, R	Transistor	Q701	1
2SC536-E, F	Transistor	Q603, 604, 605, 606	4
DS442	Diode	D602	1
WZ115	Diode	ZD701	1
XZ070	Diode	ZD991	1
XZ088	Diode	ZD401~404	4
XZ100	Diode	ZD901, 902, 992	3
1S1555	Diode	D901~903, 911~913, 991~993	9
GP30D-L	Diode	D401~404	4
1N4002	Diode	D405, 601, 604, 994	4
GL105N51	LED	LD701, 706	2
GL9PR33	LED	LD401~406, 711, 712	8
BA6124	IC	IC702, 703	2
NJM4560DX	IC	IC101	1
STK465	IC	IC301	1
TA7318P	IC	IC701	1
TC9145P	IC	IC901, 902	2
EWK8CA018B15	Rotary potentiometer	VR602	1
EWGG0A013C15	Potentiometer	VR603, 604	2
EWHH4A507G55	Potentiometer	VR601	1
ESB827S	Power switch	SW801	1
ESB62358	Push switch	Function	1
SW-1601109	Push switch	H. filter~ASS	1
AJC-002-AAB	RCA jack 4P		2
AJC-003-AAB	RCA jack 6P		1
HLJ0307-01-020	H.P. jack	HP807	1
HSJ0780-01-010	ASS jack		3
FUH-002	Fuse holder		4
PT-S08P12	Socket 8P (S.P.)		1
NPT-1125S	Power transformer	PT801	1
FU-521628T	Fuse	F801	1
FU-522027T	Fuse	F301, 302	2
FU-523127T	Fuse	F401, 402	2
RP-001	Terminal pin	TP101, 301, 302, 303	4
163740-2	Zip strip		1
163740-3	Zip strip		2
UB-0027	Terminal (GND.)		1
PC-012	RCA pin coad ass'y		3
HP-452	Printed circuit board		1
M-452	Printed circuit board		1
MAS-452	Printed circuit board		1
MD-463	Printed circuit board		1
MF-452	Printed circuit board		1
MI-452	Printed circuit board		1
MI-463	Printed circuit board		1
MT-419	Printed circuit board		1
MV-452	Printed circuit board		1
PI-452	Printed circuit board		1
PW-452	Printed circuit board		1
SP-452	Printed circuit board		1
KA25ST101J	Carbon resistor	R315	1
KA25ST102J	Carbon resistor	R107, 108, 301, 302, 309, 310, 715~724, 901~903, 995	20
KA25ST103J	Carbon resistor	R604, 605, 611, 725, 726	5
KA25ST104J	Carbon resistor	R103~106, 608	5
KA25ST105J	Carbon resistor	R606, 607, 731, 732	4
KA25ST121J	Carbon resistor	R711~713, 733	4
KA25ST123J	Carbon resistor	R201, 202	2
KA25ST124J	Carbon resistor	R915, 917, 921	3
KA25ST153J	Carbon resistor	R503, 504	2
KA25ST154J	Carbon resistor	R313, 314, 906~913	10
KA25ST182J	Carbon resistor	R203, 204, 207, 208	4
KA25ST222J	Carbon resistor	R101, 102, 307, 308	4
KA25ST224J	Carbon resistor	R610	1
KA25ST272J	Carbon resistor	R714	1
KA25ST273J	Carbon resistor	R727, 728	2
KA25ST331J	Carbon resistor	R701~710	10
KA25ST332J	Carbon resistor	R904, 905, 993, 994	4
KA25ST334J	Carbon resistor	R609	1
KA25ST433J	Carbon resistor	R111, 112	2
KA25ST471J	Carbon resistor	R113, 114	2
KA25ST472J	Carbon resistor	R211, 212, 407	3
KA25ST473J	Carbon resistor	R115, 116	2
KA25ST514J	Carbon resistor	R109, 110	2
KA25ST561J	Carbon resistor	R209, 210	2
KA25ST562J	Carbon resistor	R213, 214, 408~411, 601	7
KA25ST563J	Carbon resistor	R281, 282	2
KA25ST564J	Carbon resistor	R914, 916, 918~920, 922	6
KA25ST681J	Carbon resistor	R303, 304	2
KA25ST683J	Carbon resistor	R602	1
KA25ST820J	Carbon resistor	R729, 730	2
KA25ST822J	Carbon resistor	R603	1
KA25ST823J	Carbon resistor	R205, 206	2
KA50ST182J	Carbon resistor	R405, 406	2
KA50ST271J	Carbon resistor	R401~404	4
KA50ST272J	Carbon resistor	R996	1
KA50ST8R2J	Carbon resistor	R305, 306	2
SA-1WT221J	Metal oxide resitor	R801, 802	2
SVR-08T3B102	Semi-variable resistor	SVR701, 702	2
LUB1H682MHS	Electrolytic capacitor	C401, 402	2
LL-25TW4R7M	Low leak. electrolytic capacitor	C101, 102, 111, 112	4
LL-35TW100M	Low leak. electrolytic capacitor	C211~214	4
LL-50TW1R0M	Low leak. electrolytic capacitor	C301, 302	2
MS-10TW101M	Electrolytic capacitor	C109, 110	2
MS-16TW100M	Electrolytic capacitor	C705, 706	2
MS-16TW101M	Electrolytic capacitor	C313, 314, 703	3
MS-16TW470M	Electrolytic capacitor	C912, 913	2
MS-25TW101M	Electrolytic capacitor	C411, 412	2
MS-25TW471M	Electrolytic capacitor	C407, 408	2
MS-35TW221M	Electrolytic capacitor	C405, 406	2
MS-50TWR22M	Electrolytic capacitor	C911, 991	2
MS-50TWR47M	Electrolytic capacitor	C704	1
MS-50TW1R0M	Electrolytic capacitor	C606, 701, 702, 907~909	6
MS-50TW100M	Electrolytic capacitor	C403, 404, 603, 607	4
MS-50TW101M	Electrolytic capacitor	C311,608	2
MS-50TW4R7M	Electrolytic capacitor	C601, 602	2
MS-50TW470M	Electrolytic capacitor	C307, 308, 604	3
MY-50VS102J	Mylar capacitor	C507, 507, 508, 508	4
MY-50VS104J	Mylar capacitor	C203, 204	2
MY-50VS182J	Mylar capacitor	C113, 114	2
MY-50VS222J	Mylar capacitor	C207, 208	2
MY-50VS223J	Mylar capacitor	C201, 202, 209, 210	4
MY-50VS272J	Mylar capacitor	C215, 216	2
MY-50VS393J	Mylar capacitor	C205, 206, 505, 506	4
MY-50VS472M	Mylar capacitor	C707, 708	2
MY-50VS473M	Mylar capacitor	C309, 310, 803, 804	4
MY-50VS562J	Mylar capacitor	C107, 108	2
HE40SJSL090D	Ceramic capacitor	C305, 306	2
HE40SJYB101K	Ceramic capacitor	C103, 104, 810~817	10
HE40SJYB221K	Ceramic capacitor	C105, 106	2
HE50SJSL820K	Ceramic capacitor	C303, 304	2
HE70SJYF103Z	Ceramic capacitor	C819~822	4
HE90SJYF223Z	Ceramic capacitor	C493, 823, 824	3
H11SEYF223Z	Ceramic capacitor	C409, 410, 491, 492	4
ECQU2A103MF	Metallized film capacitor	C800	1
ACC-005	Line cord	AC801	1
SR-3P-4	Cord stopper		1
N10246-1	Front panel		1
N43165	Display window		1
N43055-GY	Knob ring	Volume	1
N43239	ASS badge		1
N20974-1-BR	Cabinet		1
N20850A	Bottom board		1
NO.7102B	Foot		4
N21013	Rear panel		1
N43018-BR	Knob 38	Volume	1
N43019-BR	Knob 31	Bass, treble, balance	3
N43017-AS-BR	Push button	ASS	1
N43017-AU-BR	Push button	AUX	1
N43017-BR	Push button	Power	1
N43017-DU-BR	Push button	Dubbing	1
N43017-HF-BR	Push button	H. filter	1
N43017-LD-BR	Push button	Loudness	1
N43017-MO-BR	Push button	Mono	1
N43017-PH-BR	Push button	Phono	1
N43017-SA-BR	Push button	SP A	1
N43017-SB-BR	Push button	SP B	1
N43017-TU-BR	Push button	Tuner	1
N43017-T1-BR	Push button	Tape 1	1
N43017-T2-BR	Push button	Tape 2	1
N30574B	Side chassis R		1
N30649	Side chassis L		1
N20914B	Support chassis (P.T.)		1
N43437	Spacer		12
N42780	Shield plate	Bass, treble, balance	1
N42781	Shield plate	Volume	1
N43343	Shield cover	SP A, SP B	1
N43058	Fittings (Headphone jack)		1
N43206	Switch holder		1
N42849	Fittings R (Heat sink)		1
N43073	Fittings L (Heat sink)		1
N42883	Fittings (P.T.)		2
N30618-BK	Heat sink	Power IC	1
N42471	Heat sink	Regulator	1
N43433	Shield paper		1
N43101	PCB cover	PW-452	1
N43499	Insulation sheet		1
N43463	Universal spacer		12
N43114	Shipping carton		1
N20890A	Packing pad R		1
N20891A	Packing pad L		1
N41318	Polyethylen bag (unit)		1
N40487	Polyethylene bag (accessories)		1
N41853-162	Label, fuse		1
N41853-202	Label, fuse		2
N41853-312	Label, fuse		2
N43160	Label, serial number		2
OM-373	Instruction manual		1
FT-002	FTZ sheet		1
C-006	Circuit diagram		1
TBB+30X08-Y	Tap screw B, bind head, Y		5
TCB+40X10-N	Tap screw C, bind head, N		12
TPM+30X08-N	Tap screw P, round head, N		18
TPS+30X08-N	Tap screw P, flat head, N		3
TSA+30X14-Y	Tap screw S, (for power IC)		2
TSB+30X06-N	Tap screw S, bind head, N		11
TSB+30X06-Y	Tap screw S, bind head, Y		7
TSC+30X08-N	Tap screw S, washer faced, N		13
2AWX0830-05-N	Plain washer, N		1
2AWX1040-08-N	Plain washer, N		4
2AE-03	Solder lug		4
2AE-32	Bind lug		1
59BS1692	GND lug		1